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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of David W. Koenig, et al. Art Unit 3761
Serial No. 10/608,661
Filed June 27, 2003
Confirmation No. 7070
For WIPE COMPRISING A PATHOGEN SELECTIVE ANTIMICROBIAL
Examiner Melanie Jo Hand

April 23, 2007

APPEAL BRIEF

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REFERENCES

Thomson West, Manual of Patent Examining Procedure, 8th Ed.
Rev. No. 5 (2006).....11

CASES

Ex parte Clapp, 227 USPQ 972, 973 (Bd. Patt. App. & Inter.
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APPEAL BRIEF

This is an appeal from the final rejection of the claims of the above-identified application made in the Office action dated January 4, 2007. A Notice of Appeal was filed on February 21, 2007.

I. REAL PARTY IN INTEREST

The real party in interest in connection with the present appeal is Kimberly-Clark Worldwide, Inc. of 401 N. Lake Street, Neenah, Wisconsin 54957-0349, a corporation of the state of Delaware, owner of a 100 percent interest in the pending application.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any pending appeals or interferences which may be related to, directly affect or be directly affected by, or have a bearing on, the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-30 are currently pending in the application. A copy of the pending claims appears in the Claims Appendix of this Brief.

Claims 1-30 stand rejected under 35 U.S.C. §103(a). The rejection of claims 1-30 under 35 U.S.C. §103(a) is being appealed.

IV. STATUS OF AMENDMENTS

No amendments have been filed after the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following summary correlates claim elements to specific embodiments described in the application specification, but does not in any manner limit claim interpretation. Rather, the following summary is provided only to facilitate the Board's understanding of the subject matter of this appeal.

Diaper rash is caused by several factors, one of which is prolonged exposure to moisture. Moisture is conducive to bacteria growth and promotes skin maceration and breakdown which allows the bacteria to infect the damaged skin. The occasional presence of feces, which can include vast numbers of organisms, further increases the potential for bacterial and fungal infection of damaged skin. Further, some bacteria produce ammonia through degradation of urine. Ammonia is used as a nutritional substrate by bacteria, resulting in growth of more bacteria and production of more ammonia in an increasing detrimental cycle. The production of ammonia also raises the pH

of the skin. Normal skin pH is between about 4 and about 6.8. This range tends to inhibit bacterial growth. As pH increases, bacterial growth increases. Further, some enzymes contained in feces such as lipases and proteases, which damage skin are more active at high pH. The skin can also be damaged by an increase in pH. Thus, the production of ammonia causes several detrimental effects which can lead to diaper rash. See Specification at ¶3.

Increases in ammonia amounts also increase offensive odors, which can be embarrassing, particularly for incontinent adults. Thus, reduction of ammonia production from urine is advantageous for several reasons, including improving skin health and decreasing unwanted odors. See Specification at ¶4.

As noted above, the proliferation of some types of bacteria on the skin's surface can lead to unwanted problems associated with the skin. Although most bacteria located on or near the surface of skin are potentially detrimental, such as Gram negative bacteria (and yeast), some bacteria, including some Gram positive bacteria, are actually beneficial on the skin surface. As such, it would be beneficial to have a wet wipe product for cleaning skin that comprises a pathogen selective antimicrobial which could substantially minimize or eliminate the growth of Gram negative bacteria and yeast, yet not substantially affect the growth of Gram positive bacteria. See Specification at ¶5.

In accordance with the present disclosure, it has been discovered that compositions containing a Yucca species extract are highly effective urease inhibitors (i.e., substances which inhibit production of ammonia from urine) when the compositions are applied directly to the skin or incorporated into a substrate such as a woven or non-woven material and used as a

wipe. Additionally, it has been discovered that Yucca species extracts are pathogen selective antimicrobial agents that can be incorporated directly into a wet wipe solution alone or in combination with a trace amount of a broad spectrum antimicrobial to control bacterial growth. See Specification at ¶11.

Independent claim 1 of the present application is directed to a wet wipe for improving skin health comprising a wipe substrate and a liquid formulation (see Specification at ¶7). The liquid formulation comprises a Yucca species extract (see Specification at ¶26) and a broad spectrum antimicrobial (see Specification at ¶29). See also Specification at ¶7.

Independent claim 10 of the present application is directed to a wet wipe for improving skin health comprising a wipe substrate and a liquid formulation (see Specification at ¶7). The liquid formulation comprises a Yucca species extract (see Specification at ¶26) and a natural broad spectrum antimicrobial (see Specification at ¶30 and 34).

Independent claim 19 of the present application is directed to a method for improving skin health comprising contacting the skin with a wet wipe capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria (see Specification at ¶8). The wet wipe comprises a wipe substrate and a liquid formulation (see Specification at ¶8), the liquid formulation comprising a Yucca species extract (see Specification at ¶8 and 26).

Independent claim 23 of the present application is directed to a method for improving skin health comprising contacting the skin with a wet wipe capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not

substantially affecting the growth rate of Gram positive bacteria (see Specification at ¶9). The wet wipe comprises a wipe substrate and a liquid formulation (see Specification at ¶9), the liquid formulation comprising a Yucca species extract (see Specification at ¶9 and 26) and a natural broad spectrum antimicrobial (see Specification at ¶9, 30, and 34).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-5 and 7-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Howard, et al. (U.S. Patent No. 6,552,171), and claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Howard, et al. (U.S. Patent No. 6,552,171) in view of Sato (abstract of Japanese Patent No. 2001011496).

VII. ARGUMENT

Claims 1-5 and 7-30 are patentable under 35 U.S.C. §103(a) over Howard, et al. (U.S. Patent No. 6,552,171)

Independent claim 1 is directed to a wet wipe for improving skin health comprising a wipe substrate and a liquid formulation. The liquid formulation comprises a Yucca species extract and a broad spectrum antimicrobial.

Howard, et al. disclose hydrolyzed jojoba protein and methods for producing hydrolyzed jojoba protein. Also disclosed are cosmetic products, such as shampoos, conditioners, bath and shower gels, and sanitizing wipes, among others, comprising the hydrolyzed jojoba protein. In specific examples, Howard, et al. also disclose a hand lotion and a moisturizing hand cream

formulation comprising 0.05% Green Tea Extract and 0.03% Yucca extract.

Initially, applicants note that Howard, et al. do not disclose a wet wipe comprising a wipe substrate and a liquid formulation comprising a Yucca species extract and a broad spectrum antimicrobial. As noted above, the Howard, et al. reference is directed primarily to hydrolyzed jojoba protein and methods for producing hydrolyzed jojoba protein, not compositions and formulations comprising Yucca species extract. In fact, the only disclosure anywhere in Howard, et al. of a Yucca extract is in Tables 6 and 7 of the Examples of Howard, et al., which merely list Yucca extract as one ingredient in a list of ingredients that may be used to make hand lotion (Table 6) and moisturizing hand cream (Table 7). The hand lotion and moisturizing hand cream disclosed in Tables 6 and 7 of Howard, et al. (which also comprise green tea extract) are not, however, a disclosure of a liquid formulation for use with a wet wipe. Howard, et al. thus fail to teach or suggest all the limitations of applicants' claim 1.

Additionally, there is no motivation or suggestion to modify the teachings of Howard, et al. to arrive at applicants' claimed wet wipe. In particular, one skilled in the art would not be motivated to incorporate into the sanitizing wipe listed in column 3, line 11 of Howard, et al., the specific combination of Yucca species extract and green tea extract, which is solely disclosed in an unrelated embodiment.

As disclosed in the specification of the present application, Yucca species extracts are pathogen selective antimicrobial agents that can be incorporated into a wet wipe solution in combination with a broad spectrum antimicrobial to control bacterial growth. More particularly, the broad spectrum

antimicrobial agent can act to supplement the pathogen selective *Yucca* species extract antimicrobial agent by, for example, introducing a trace amount of broad spectrum antimicrobial into the wet wipe solution (i.e., an amount that would not be sufficient to kill all of the bacteria present on the skin if the broad spectrum antimicrobial were used alone and without the pathogen selective antimicrobial agent in the wet wipe solution). Because the pathogen selective antimicrobial *Yucca* species extracts do not always completely inhibit the growth of, or kill, all the Gram negative bacteria and yeast present on the skin, by introducing a trace amount of broad spectrum antimicrobial agent into the wet wipe solution, the combination of antimicrobial agents will substantially inhibit the growth of, or kill, the problematic bacteria and yeast, while only having a slightly negative impact on beneficial flora present on the skin, due to the broad spectrum antimicrobial agent. After application to the skin of the wet wipe formulation, the skin is left cleaned and with beneficial flora on the surface thereof.¹

There is, however, no recognition in Howard, et al. of the benefits of incorporating the combination of a *Yucca* species extract and a broad spectrum antimicrobial into a liquid formulation for use with a wet wipe, or more specifically, of the benefits of the particular combination of *Yucca* species extract and green tea extract. Nor is there any suggestion in Howard, et al. that green tea extract, *Yucca* extract, or a combination of green tea extract and *Yucca* extract would provide any particular benefit in a sanitizing wipe. In fact, Howard, et al. do not recognize any antimicrobial effect for either *Yucca* extract or green tea extract, but rather list an entirely

¹ See Specification at ¶29.

different function for Yucca extract and green tea extract in Tables 6 and 7; i.e., Yucca extract is described as a stimulant, while green tea extract is described as an astringent. Why then would one skilled in the art be motivated to select the combination of green tea extract and Yucca extract for incorporation into a sanitizing wipe over any of the other numerous formulation components set forth in the examples of Howard, et al.? One skilled in the art would simply not be so motivated, as there is nothing in Howard, et al. to suggest the benefits of that particular combination of components, and nothing to suggest that either green tea extract or Yucca extract has any particular sanitizing effects.²

The Examiner has stated that Howard, et al. clearly teach that any of the solutions are intended for use with a sanitizing wipe, including wet wipes, and it therefore would have been obvious to apply the Yucca-containing compositions in Tables 6 and 7 to a sanitizing wipe. Applicants respectfully disagree with the Examiner's interpretation of the Howard, et al. reference.

As noted above, Howard, et al. disclose a fairly lengthy list of cosmetic products into which their jojoba products may be incorporated. More specifically, Howard, et al. state:

Among the cosmetic products which can benefit from incorporation of the jojoba products of the invention are those selected from the group consisting of shampoos, shampoo conditioners, hair styling gels, hair conditioners, hair reparatives, hair tonics, hair fixatives, hair mousses, bath and shower gels, liquid soaps, moisturizing sprays, makeup, pressed powder formulations, lip products, bath additives, sanitizing

² The Examiner has in fact agreed that Howard, et al. do not suggest that Yucca extract has any antimicrobial properties. See p. 2 of the final Office action ("...applicant continues on to correctly acknowledge that there 'is nothing to suggest that Yucca extract has any antimicrobial properties.'").

wipes, hand sanitizers, premoistened towelettes, skin lotions and creams, shaving creams, and sunscreens.³

As can be seen from this passage, Howard, et al. merely list sanitizing wipes as one type of cosmetic product into which the hydrolyzed jojoba proteins can be incorporated. There is, however, no disclosure that the sanitizing wipes should or could also have incorporated therein a hand lotion or moisturizing hand cream formulation, such as set forth in Tables 6 and 7 of Howard, et al.

In this regard, it appears the Examiner is considering the phrase "jojoba products of the invention" in the above-quoted passage to refer to the formulations set forth in the Examples of Howard, et al. Applicants disagree with this interpretation.

As noted above, the Howard, et al. reference is directed to a new form of jojoba protein, i.e., hydrolyzed jojoba protein and derivatives thereof, as well as uses of the hydrolyzed jojoba protein in cosmetic formulations.⁴ Also disclosed are procedures for preparing the hydrolyzed jojoba protein. Thus, when Howard, et al. is read as a whole, it is clear that the phrase "jojoba products of the invention" in the above-quoted passage is referring to hydrolyzed jojoba protein and derivatives thereof. The cosmetic products described in the above-quoted passage, and the formulations set forth in the Examples of Howard, et al., merely illustrate possible uses of the hydrolyzed jojoba products.

There is simply nothing to support the Examiner's assertion that Howard, et al. teach that the hand lotion and moisturizing hand cream of Tables 6 and 7 are intended for use with a sanitizing wipe. Rather, applicants submit that sanitizing

³ Howard, et al. at col. 3, lines 4-13.

wipes, hand lotion, and moisturizing hand cream, as well as the other cosmetic products listed in the above-quoted passage and described in the Examples of Howard, et al., are merely alternative products into which the hydrolyzed jojoba products can be incorporated, not products that are intended to be combined with one another. Thus, contrary to the Examiner's assertion, Howard, et al. do not teach that the formulations set forth in Tables 6 and 7 are intended for use with a sanitizing wipe.

Additionally, as noted above, the compositions set forth in Tables 6 and 7 of Howard, et al. are a hand lotion and moisturizing hand cream. Why would one skilled in the art be motivated to incorporate a hand lotion or moisturizing hand cream into a sanitizing wipe? There is no teaching or suggestion in Howard, et al. that the hand lotion or moisturizing hand cream formulations set forth in Tables 6 and 7 would have any sanitizing effect, or would even be suitable for incorporation into a sanitizing wipe. In fact, it is just as likely that such formulations may even interfere with the sanitizing ability of a sanitizing wipe. There is simply nothing in Howard, et al. that suggests this combination.

Furthermore, it is well settled that the burden is on the Examiner to provide some suggestion of the desirability to do what the inventor has done; that is, the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to be obvious in light of the teachings of the references. Applicants respectfully submit that the Examiner has not presented a convincing line of reasoning as to why one skilled in the art would be motivated to

⁴ *Id.* at col. 1, line 66 to col. 2, line 2.

modify Howard, et al. to produce a wet wipe comprising a wipe substrate and a liquid formulation, the liquid formulation comprising a *Yucca* species extract and a broad spectrum microbial, as required by the MPEP.⁵

The Examiner has merely stated that motivation is found in the teaching in Howard, et al. that any of the solutions are intended for use with a sanitary wipe, including wet wipes. However, for the reasons set forth above, this is an improper interpretation of Howard, et al. Howard, et al. say nothing about incorporating the compositions set forth in the Examples, or more specifically a composition containing *Yucca* species extract and a broad spectrum antimicrobial, into a wet wipe. The Examiner has not provided any reasoning whatsoever as to why one skilled in the art, in the absence of applicants' disclosure as a blueprint, would modify the hand lotion and moisturizing hand cream set forth in Tables 6 and 7 by incorporating them into a sanitizing wipe. Claim 1 is thus patentable for this additional reason.

In light of the foregoing, applicants submit that claim 1 is patentable over Howard, et al. Claims 2-5 and 7-9 depend from claim 1 and are thus patentable over Howard, et al. for the same reasons as set forth above for claim 1 as well as for the additional elements they require.

⁵ MPEP §2142 states:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." quoting Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985) (emphasis added).

Claim 10 is similar to claim 1, except the liquid formulation comprises a Yucca species extract and a natural broad spectrum antimicrobial. Claim 10 is thus patentable over Howard, et al. for the same reasons as set forth above for claim 1.

Claims 11-18 depend from claim 10 and are thus patentable over Howard, et al. for the same reasons as set forth above for claim 10 as well as for the additional elements they require.

Claims 19-30

Claim 19 is directed to a method for improving skin health. The method comprises contacting the skin with a wet wipe capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria, the wet wipe comprising a wipe substrate and a liquid formulation, the liquid formulation comprising a Yucca species extract.

Claim 19 is patentable over Howard, et al. for reasons similar to those set forth above for claim 1. In particular, Howard, et al. fail to teach or suggest a wet wipe comprising a liquid formulation that comprises a Yucca species extract, nor is there any motivation to modify the teachings of Howard, et al. to arrive at such a wipe.

Additionally, applicants note that there is no teaching or suggestion in Howard, et al. of contacting the skin with a wet wipe capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria. As noted above, the only disclosure in Howard, et al. of a wipe is on col. 3, ln. 11, which lists sanitizing wipes as one type of cosmetic product into which the jojoba protein may

be incorporated. There is, however, no disclosure or suggestion that these wipes should or could be capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria. Nor is there any teaching or suggestion that such a wipe should comprise a Yucca species extract. As stated in Tables 6 and 7 of Howard, et al., the Yucca extract is included in the hand lotion and moisturizing hand cream formulations as a stimulant. There is nothing in Howard, et al. to suggest that Yucca extract has any antimicrobial properties,⁶ much less that a wipe incorporating a Yucca extract may be capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria. Claim 19 is thus patentable over Howard, et al. for this additional reason.

In the Response to Arguments section of the final Office action, the Examiner has stated that it appears applicant is associating the presence of Yucca extract with the benefit of reducing Gram negative bacteria. The Examiner goes on to state that the claim does not require that the Yucca extract be capable of reducing Gram negative bacteria, but rather the wet wipe itself be capable of reducing such bacteria, and the solution taught in Tables 6 and 7 of Howard, et al. contain green tea extract, which also contains catechin, which reduces the level of Gram negative bacteria.

In response, applicants respectfully note that the wet wipe contacted with the skin as set forth in claim 19 is capable not

⁶ As noted above, the Examiner has in fact agreed that Howard, et al. do not suggest that Yucca extract has any antimicrobial properties. See p. 2 of the final Office action.

only of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin, as mentioned by the Examiner, but also does not substantially affect the growth rate of Gram positive bacteria. As noted above, there is nothing in Howard, et al. that suggests that the sanitizing wipes listed on column 3, line 11 would have such an effect. Nor is there anything in Howard, et al. to suggest that the Yucca extract or green tea extract listed in Tables 6 and 7 would have this effect, or any antimicrobial effect whatsoever. There is simply nothing in Howard, et al. to suggest applicant's claimed method.

Claims 20-22 depend from claim 19 and are thus patentable for the same reasons as set forth above for claim 19 as well as for the additional elements they require.

Claim 23 is similar to claim 19, but the liquid formulation further comprises a natural broad spectrum antimicrobial. Claim 23 is thus patentable for the same reasons as set forth above for claim 19 as well as for the additional elements it requires.

Claims 24-30 depend from claim 23 and are thus patentable for the same reasons as set forth above for claim 23 as well as for the additional elements they require.

Claims 2, 11, 20, and 24

In addition, claims 2, 11, 20, and 24, which depend from claims 1, 10, 19, and 23, respectively, require the Yucca species extract be selected from the group consisting of Yucca 70 liquid, 100% Yucca Schidigera powder, and 50% Food Grade Yucca powder. Applicants note that Howard, et al. fail to disclose or suggest Yucca 70 liquid, 100% Yucca Schidigera powder, or 50% Food Grade Yucca powder. As noted above, the only mention in Howard, et al. of the use of Yucca is in Tables 6 and 7 of the Examples of Howard, et al., which merely list

Yucca extract as one ingredient that may be used to make moisturizing hand cream or hand lotion formulations. There is, however, no disclosure or suggestion that the Yucca extract could or should be Yucca 70 liquid, 100% Yucca Schidigera powder, or 50% Food Grade Yucca powder. Howard, et al. thus fail to teach or suggest this additional limitation.

The Office has stated that Howard, et al. do not explicitly teach 100% Yucca schidigera powder, but that it is widely known to use pure powder form from the Yucca schidigera plant and therefore it would have been obvious to use 100% Yucca schidigera powder as taught implicitly by Howard, et al.

As noted above, there is no disclosure or suggestion in Howard, et al. of incorporating any particular type of Yucca extract, or more particularly Yucca 70 liquid, 100% Yucca Schidigera powder, or 50% Food Grade Yucca powder, into the hand lotion or moisturizing hand cream. Applicants note that there are numerous species of Yucca and types of Yucca extracts, some of which may be used in cosmetic products (e.g., soaps and the like). There is, however, nothing in Howard, et al. that would lead one skilled in the art to choose Yucca schidigera, or more particularly, Yucca 70 liquid, 100% Yucca Schidigera powder, or 50% Food Grade Yucca powder, over any other species of Yucca or type of Yucca extract. As such, claims 2, 11, 20, and 24 are patentable for this additional reason.

Claims 8, 17, and 30

In addition, claims 8, 17, and 30, which depend from claims 1, 10, and 23, respectively, further require the broad spectrum antimicrobial (or natural broad spectrum antimicrobial) to be present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.01% (by

total weight of the formulation). Applicants note that Howard, et al. fail to disclose or suggest any formulation, much less a liquid wet wipe formulation, comprising a broad spectrum antimicrobial in the claimed amounts.

The Examiner has stated that Howard, et al. teach that green tea extract is present in both the hand lotion and moisturizing hand cream formulations set forth in Tables 6 and 7 in 0.05% by weight, and that catechin is therefore present in at most 0.05% by weight of the formulation. This is not, however, a teaching of green tea extract in a liquid formulation in applicants' claimed amounts; the amount of green tea extract present in the hand lotion and moisturizing hand cream formulations of Howard, et al. is in fact greater than that called for in applicants' claims 8, 17, and 30.

Nor would one skilled in the art be motivated to modify the amount of green tea extract present in the formulations set forth in Tables 6 and 7 to arrive at applicants' claimed amounts. As previously discussed, Howard, et al. state that green tea extract is being used in the formulations as an astringent; there is no mention of using green tea extract as a broad spectrum antimicrobial. In contrast, applicants' claims 8, 17, and 30 are directed to the amount of broad spectrum antimicrobial (or natural broad spectrum antimicrobial) present in a liquid formulation for use in a wet wipe. As such, why would one skilled in the art be motivated to adjust the amount of green tea extract in the compositions of Howard, et al. to arrive at an amount that provides suitable broad spectrum antimicrobial activity? One skilled in the art would not be so motivated. Claims 8, 17, and 30 are thus patentable for this additional reason.

Claim 6 is patentable under 35 U.S.C. §103(a) over Howard, et al. (U.S. 6,552,171) in view of Sato (abstract of Japanese Patent No. 2001011496)

Claim 6 depends from claim 1 and further requires the broad spectrum antimicrobial to be selected from the group consisting of alcohols having from one to about 6 or 7 carbon atoms per molecule, triclosan, triclocarban, p-chloro-m-xlenol, benzalkonium chloride, chlorohexidine gluconate, hexachlorophene, and combinations thereof.

Initially, applicants note that the Office has not rejected claim 1 under 35 U.S.C. §103(a) over Howard, et al. in view of the Sato abstract. Since claim 6 depends from claim 1, claim 6 is also patentable under 35 U.S.C. §103(a) over Howard, et al. in view of the Sato abstract.

Howard, et al. is discussed above. Specifically, Howard, et al. do not disclose or suggest any of the broad spectrum antimicrobials set forth in claim 6.

The Sato abstract discloses a detergent used for sterilization, taking odor off, and anti-oxidation of a food surface, and sterilization, washing, and taking odor off a working machine and the fingers of its operator. The detergent comprises 40-80 wt.% ethanol, 0.05-5 wt.% of a tea extrudate, 0.05-5 wt.% Yucca form extrudate, and 59.9-5 wt.% water. The Yucca form extrudate is derived from Yucca schidigera and has an antifungal action.

In combining these references, the Examiner has stated that Sato teaches a sterilization detergent that is comprised of ethanol, and since alcohols are known for their antimicrobial

uses, it would be obvious to modify the jojoba protein solution of Howard, et al. to contain ethanol. Applicants assert that such a combination is not proper, as there is no motivation to combine the references to arrive at each and every element of Applicants' invention.

As noted above, Howard, et al. is directed primarily to compositions comprising jojoba protein and methods for isolating jojoba protein. There is simply no recognition in Howard, et al. of the benefits of incorporating a Yucca species extract and a broad spectrum antimicrobial into a wet wipe, and no disclosure as to why an additional broad spectrum antimicrobial such as ethanol should be included in the hand lotion or moisturizing hand cream set forth in Tables 6 and 7. Such motivation is also not found in Sato. Although the Sato abstract discloses a detergent composition comprising ethanol, there is no discussion in the Sato abstract of using the ethanol-containing composition in a wet wipe or in a hand lotion or moisturizing hand cream, such as those described in Howard, et al. Therefore there is no motivation in Howard, et al. or the Sato abstract to modify or combine these references to arrive at the wet wipe of claim 6. Claim 6 is thus patentable over the cited references. As such, claim 6 is patentable over the combination of Howard, et al. and Sato.

VIII. Conclusion

A prima facie case of obviousness has not been established pursuant to 35 U.S.C. § 103, because the cited art fails to disclose, teach and/or suggest all the elements of claims 1-30. For this reason, and for those more fully stated above, Applicants respectfully request the Office's rejections be reversed and all pending claims be allowed.

The Commissioner is hereby authorized to charge \$500 for the appeal brief and any additional fees which may be required to Deposit Account No. 19-1345.

Respectfully submitted,

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CMG/LJH/cms
By EFS

CLAIMS APPENDIX

1. (original) A wet wipe for improving skin health comprising a wipe substrate and a liquid formulation, the liquid formulation comprising a *Yucca* species extract and a broad spectrum antimicrobial.

2. (original) The wet wipe as set forth in claim 1 wherein the *Yucca* species extract is selected from the group consisting of *Yucca* 70 liquid, 100% *Yucca Schidigera* powder, and 50% Food Grade *Yucca* powder.

3. (original) The wet wipe as set forth in claim 1 wherein the liquid formulation comprises from about 0.0001% (by total weight of the formulation) to about 5% (by total weight of the formulation) *Yucca* species extract.

4. (original) The wet wipe as set forth in claim 1 wherein the liquid formulation comprises from about 0.01% (by total weight of the formulation) to about 1% (by total weight of the formulation) *Yucca* species extract.

5. (original) The wet wipe as set forth in claim 1 wherein the broad spectrum antimicrobial is a botanical extract.

6. (original) The wet wipe as set forth in claim 1 wherein the broad spectrum antimicrobial is selected from the group consisting of alcohols having from one to about 6 or 7 carbon atoms per molecule, triclosan, triclocarban, p-chloro-m-xyleneol, benzalkonium chloride, chlorohexidine gluconate, hexachlorophene, and combinations thereof.

7. (original) The wet wipe as set forth in claim 1 wherein the broad spectrum antimicrobial is present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.1% (by total weight of the formulation).

8. (original) The wet wipe as set forth in claim 1 wherein the broad spectrum antimicrobial is present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.01% (by total weight of the formulation).

9. (original) The wet wipe as set forth in claim 1 further comprising an additional component selected from the group consisting of anti-acne actives, antifoaming agents, antifungal

actives, antiseptic actives, antioxidants astringents, colorants, deodorants, film formers, fragrances, moisturizers, chelating agents, skin protectants, sunscreen actives, solvents, and combinations thereof.

10. (original) A wet wipe for improving skin health comprising a wipe substrate and a liquid formulation, the liquid formulation comprising a *Yucca* species extract and a natural broad spectrum antimicrobial.

11. (original) The wet wipe as set forth in claim 10 wherein the *Yucca* species extract is selected from the group consisting of *Yucca* 70 liquid, 100% *Yucca Schidigera* powder, and 50% Food Grade *Yucca* powder.

12. (original) The wet wipe as set forth in claim 10 wherein the liquid formulation comprises from about 0.0001% (by total weight of the formulation) to about 5% (by total weight of the formulation) *Yucca* species extract.

13. (original) The wet wipe as set forth in claim 10 wherein the liquid formulation comprises from about 0.01% (by

total weight of the formulation) to about 1% (by total weight of the formulation) *Yucca* species extract.

14. (original) The wet wipe as set forth in claim 10 wherein the natural broad spectrum antimicrobial is a botanical extract.

15. (original) The wet wipe as set forth in claim 10 wherein the natural broad spectrum antimicrobial is selected from the group consisting of aloe vera, folic acid, calendula flower, echinacea purpurea tops, gota kola extract, chlorophyll, phytoplennolin extract, chamomile flower, blood root, prickly ash bark, green tea leaf, oregano leaf, peppermint oil, cinnamon bark, eucalyptus leaf, lavender oil, bio-saponin concentrate, olive leaf extract, black walnut green hulls, clove leaf, thyme herb, grapefruit seed extract, vegetable glycerin, and combinations thereof.

16. (original) The wet wipe as set forth in claim 10 wherein the natural broad spectrum antimicrobial is present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.1% (by total weight of the formulation).

17. (original) The wet wipe as set forth in claim 10 wherein the natural broad spectrum antimicrobial is present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.01% (by total weight of the formulation).

18. (original) The wet wipe as set forth in claim 10 further comprising an additional component selected from the group consisting of anti-acne actives, antifoaming agents, antifungal actives, antiseptic actives, antioxidants astringents, colorants, deodorants, film formers, fragrances, moisturizers, chelating agents, skin protectants, sunscreen actives, solvents, and combinations thereof.

19. (original) A method for improving skin health comprising contacting the skin with a wet wipe capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria, the wet wipe comprising a wipe substrate and a liquid formulation, the liquid formulation comprising a Yucca species extract.

20. (original) The method as set forth in claim 19 wherein the *Yucca* species extract is selected from the group consisting of *Yucca* 70 liquid, 100% *Yucca Schidigera* powder, and 50% Food Grade *Yucca* powder.

21. (original) The method as set forth in claim 19 wherein the *Yucca* species extract is present in the formulation is an amount of from about 0.0001% (by total weight of the formulation) to about 5% (by total weight of the formulation).

22. (original) The method as set forth in claim 19 wherein the *Yucca* extract is present in the formulation in an amount of from about 0.01% (by total weight of the formulation) to about 1% (by total weight of the formulation).

23. (original) A method for improving skin health comprising contacting the skin with a wet wipe capable of reducing the growth rate of Gram negative bacteria and yeast on the surface of the skin while not substantially affecting the growth rate of Gram positive bacteria, the wet wipe comprising a wipe substrate and a liquid formulation, the liquid formulation comprising a *Yucca* species extract and a natural broad spectrum antimicrobial.

24. (original) The method as set forth in claim 23 wherein the *Yucca* species extract is selected from the group consisting of *Yucca* 70 liquid, 100% *Yucca Schidigera* powder, and 50% Food Grade *Yucca* powder.

25. (original) The method as set forth in claim 23 wherein the liquid formulation comprises from about 0.0001% (by total weight of the formulation) to about 5% (by total weight of the formulation) *Yucca* species extract.

26. (original) The method as set forth in claim 23 wherein the liquid formulation comprises from about 0.01% (by total weight of the formulation) to about 1% (by total weight of the formulation) *Yucca* species extract.

27. (original) The method as set forth in claim 23 wherein the natural broad spectrum antimicrobial is a botanical extract.

28. (original) The method as set forth in claim 23 wherein the natural broad spectrum antimicrobial is selected from the group consisting of aloe vera, folic acid, calendula flower, *echinacea purpurea* tops, gota kola extract, chlorophyll,

phytoplenolin extract, chamomile flower, blood root, prickly ash bark, green tea leaf, oregano leaf, peppermint oil, cinnamon bark, eucalyptus leaf, lavender oil, bio-saponin concentrate, olive leaf extract, black walnut green hulls, clove leaf, thyme herb, grapefruit seed extract, vegetable glycerin, and combinations thereof.

29. (original) The method as set forth in claim 23 wherein the natural broad spectrum antimicrobial is present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.1% (by total weight of the formulation).

30. (original) The method as set forth in claim 23 wherein the natural broad spectrum antimicrobial is present in the liquid formulation in an amount of from about 0.0001% (by total weight of the formulation) to about 0.01% (by total weight of the formulation).

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EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.